5

The state of the s

The think

20

amplifying a known amount of a control nucleic acid and said target nucleic acid, wherein said control nucleic acid comprises at least one contiguous sequence of at least 8 nucleotides in length essentially parallel complementary to said target nucleic acid region or to the complementary strand of said target nucleic acid region.

2. A method for quantitation of a target nucleic acid region comprising the steps of:

- a) amplifying said target nucleic acid region and a known amount of a control nucleic acid, wherein said control nucleic acid comprises at least one contiguous sequence of at least 8 nucleotides in length essentially parallel complementary to said target nucleic acid region or to the complementary strand of said target nucleic acid region,
- b) detecting a signal indicative for the amount of amplification product obtained from said control nucleic acid and detecting a signal indicative for the amount of amplification product obtained from said target nucleic acid,
- c) calculating the amount of said target nucleic acid using the known amount of said control nucleic acid, the signal indicative for the amount of amplification product obtained from said control nucleic acid detected in step b) and the signal indicative for the amount of amplification product obtained from said target nucleic acid detected in step b).
- 3. The method of Claim 1 or 2, wherein said target nucleic acid and said control nucleic acid are amplified by PCR.

30

25

299331_1

29

- 4. The method of Claim 1 or 2, wherein the amplified product is detected homogeneously.
- 5. The method of Claim 1 or 2, wherein said target nucleic acid and said control nucleic acid are amplified in the same reaction vessel.
 - 6. A control nucleic acid for use in a reaction for the amplification of a target nucleic acid region, wherein said control nucleic acid comprises at least one contiguous sequence of at least 8 nucleotides in length essentially parallel complementary to said target nucleic acid region or to the complementary strand of said target nucleic acid region.
 - 7. The control nucleic acid of Claim 6, wherein said target nucleic acid region comprises a primer binding site and said control nucleic acid comprises a sequence that is parallel complementary to the primer binding site of said target nucleic acid or to the complementary strand of said target nucleic acid.
 - 8. The control nucleic acid of Claim 6, wherein said target nucleic acid region comprises a probe binding site and said control nucleic acid comprises a sequence that is parallel complementary to the probe binding site of said target nucleic acid or the complementary strand of the probe binding site of said target nucleic acid.
 - 9. A composition comprising a target nucleic acid and a control nucleic acid, wherein said control nucleic acid comprises at least one contiguous sequence of at least 8 nucleotides in length essentially parallel complementary to said target nucleic acid region or to the complementary strand of said target nucleic acid region.
 - 10. The composition of Claim 9, wherein said target nucleic acid comprises a primer binding site and said control nucleic acid comprises a sequence that is parallel complementary to the primer binding site of said target nucleic acid or to the complementary strand of said target nucleic acid.

299331_1

5

15

20

25

30

5

- 11. The composition of Claim 9, wherein said target nucleic acid comprises a probe binding site and said control nucleic acid comprises a sequence that is parallel complementary to the probe binding site of said target nucleic acid or the complementary strand of the probe binding site of said target nucleic acid.
- 12. The composition of Claim 9, further comprising primers for the amplification of said target nucleic acid and primers for the amplification of said control nucleic acid.
- 13. A kit for the amplification of a target nucleic acid comprising an instruction manual, a target nucleic acid and a control nucleic acid wherein said control nucleic acid comprises at least one contiguous sequence of at least 8 nucleotides in length essentially parallel complementary to said target nucleic acid region or to the complementary strand of said target nucleic acid region.
- 14. The kit of Claim 13, further comprising primers for the amplification of said target nucleic acid and primers for the amplification of said control nucleic acid.